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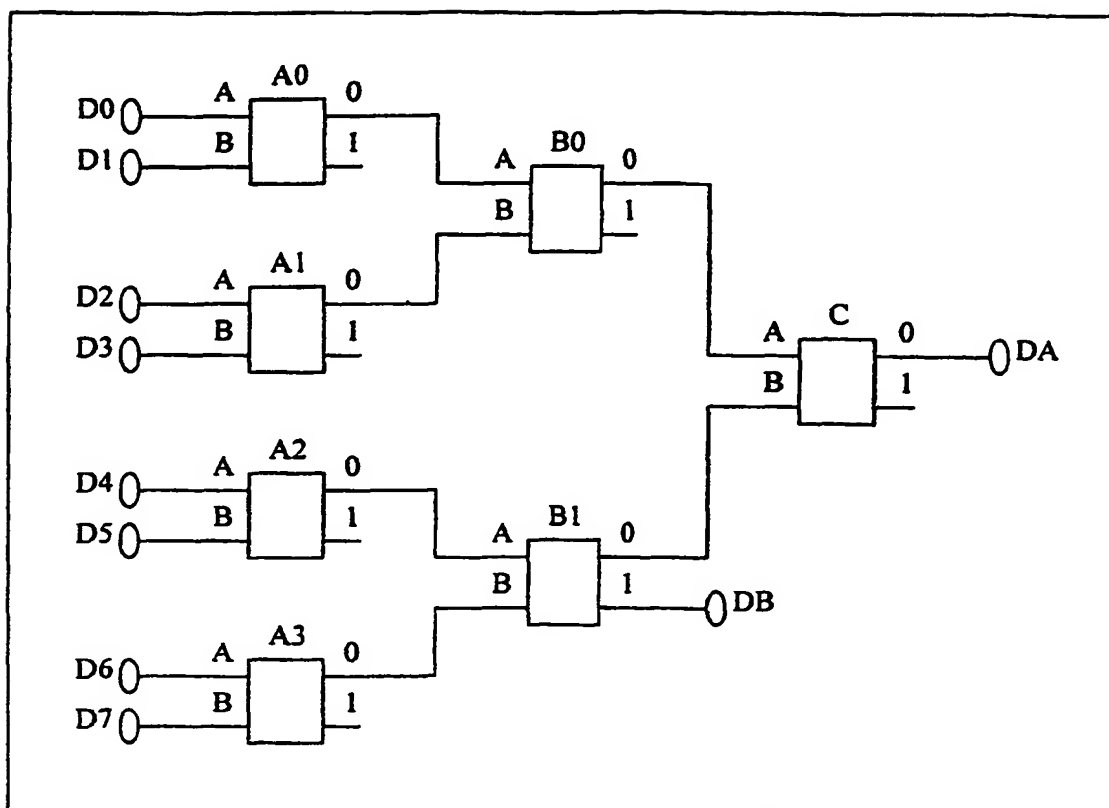


Fig. 1

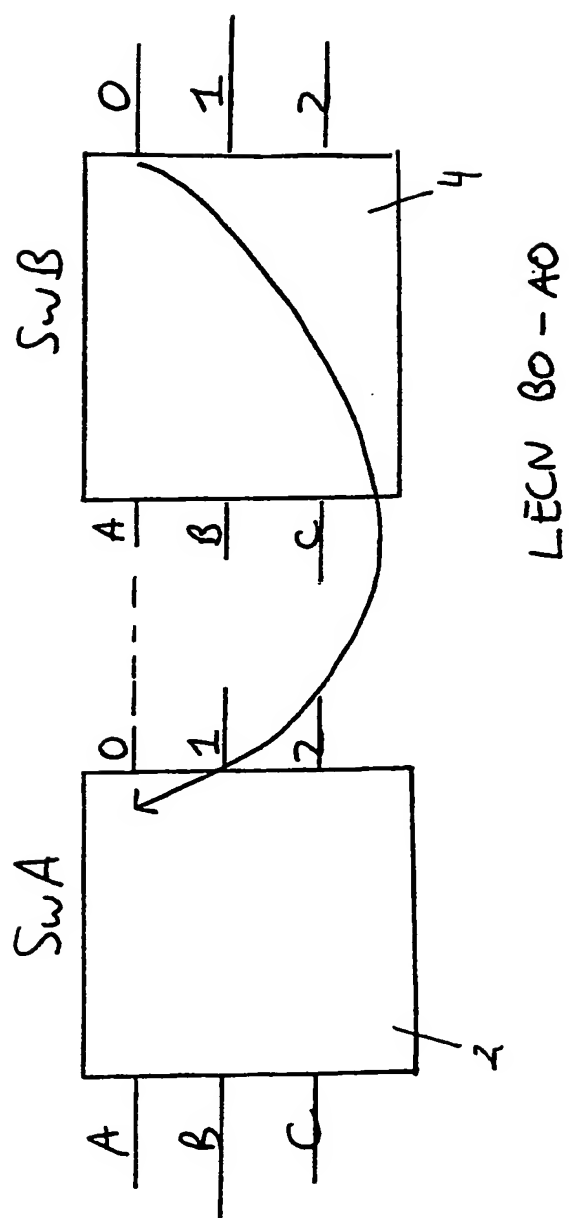


Fig. 2

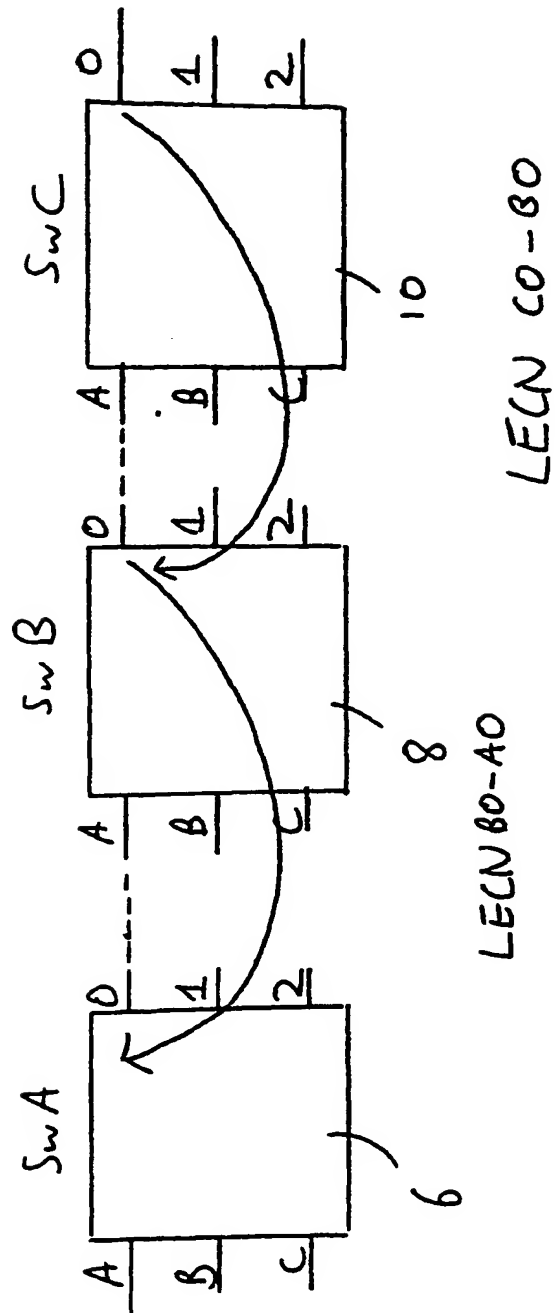


Fig. 3

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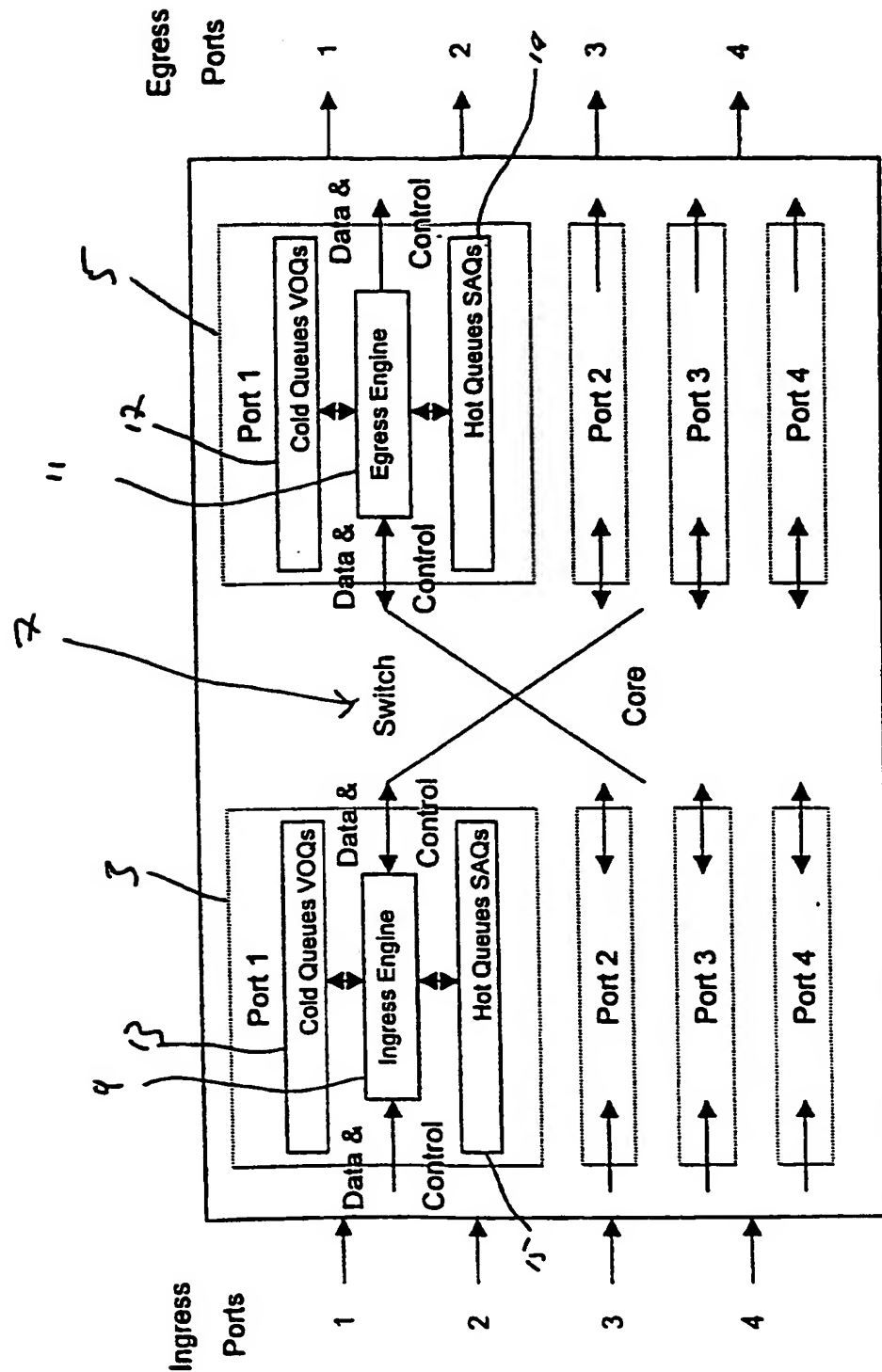


Fig. 4A

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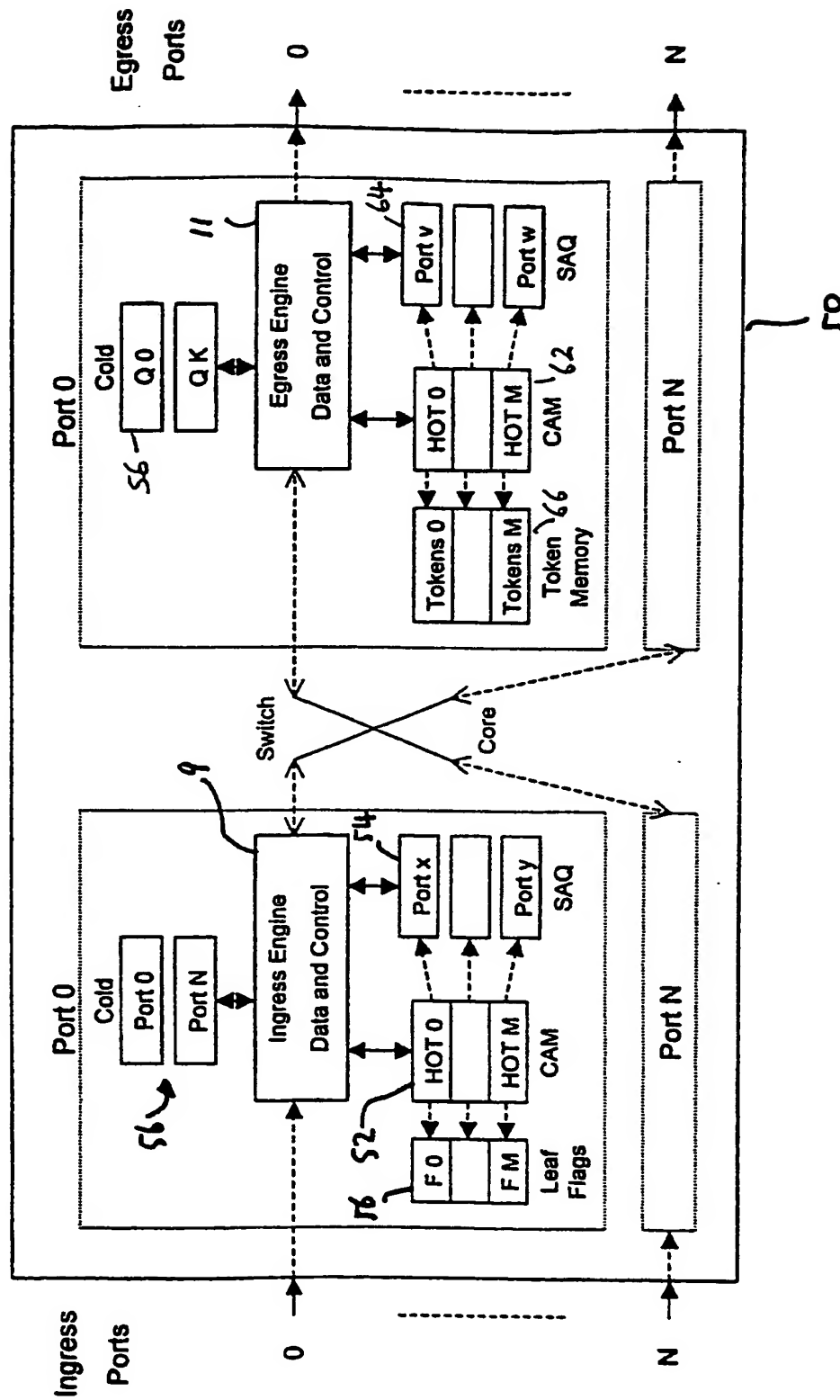


Fig. 48

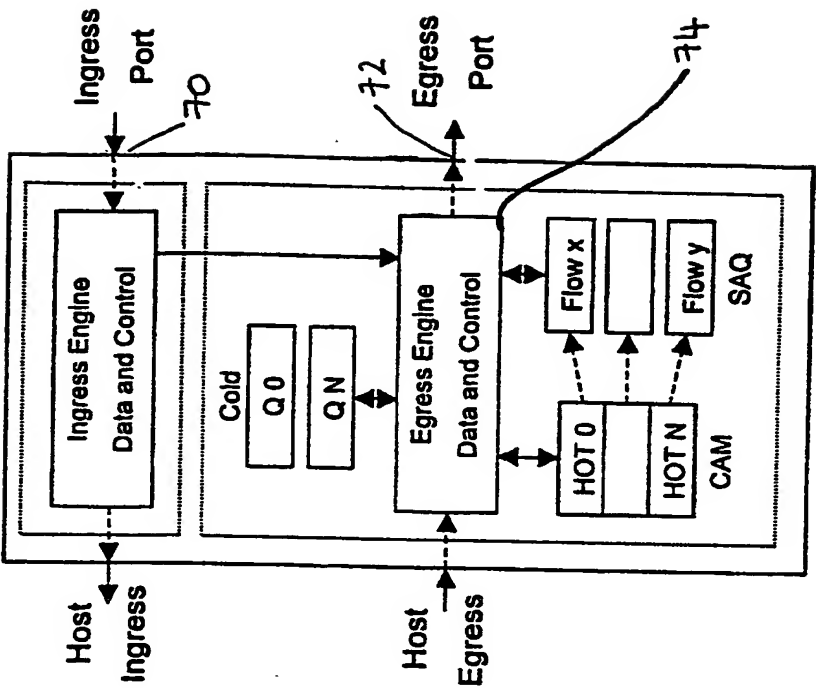


Fig. 4C

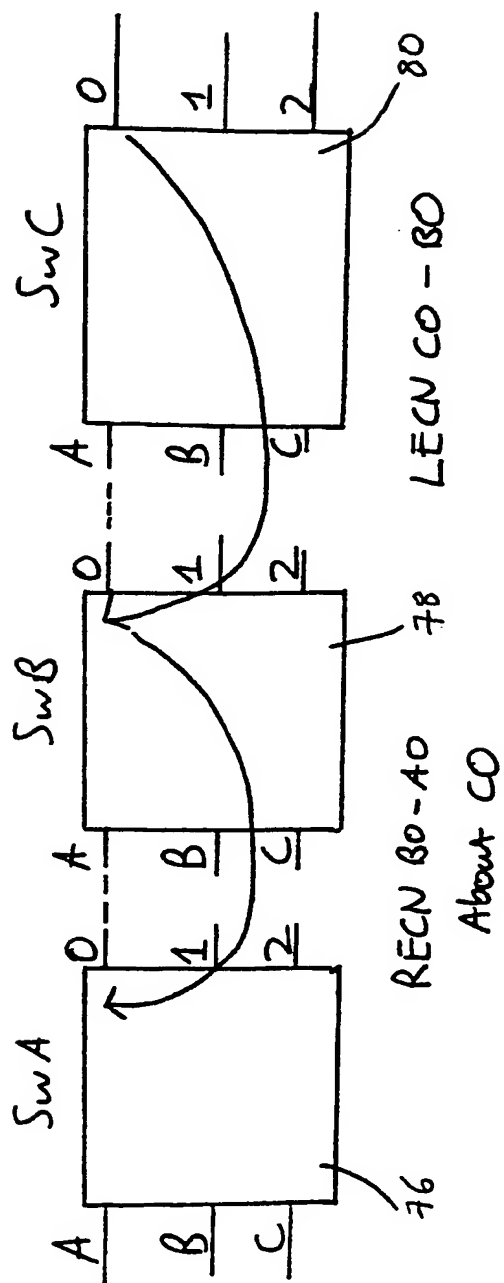


Fig. 5

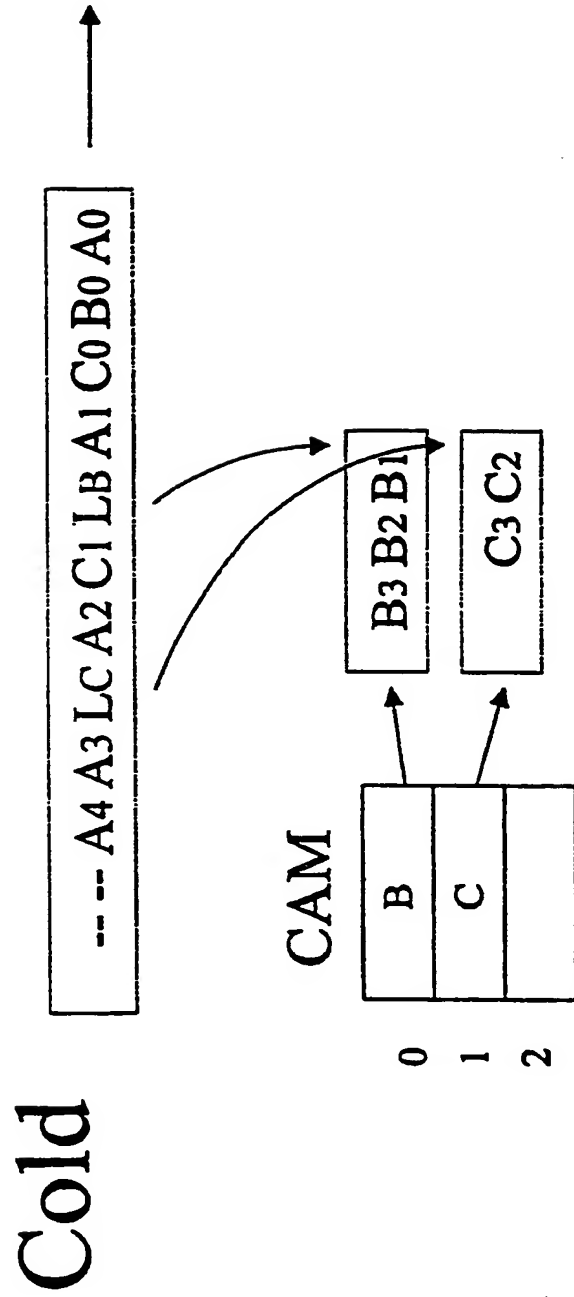
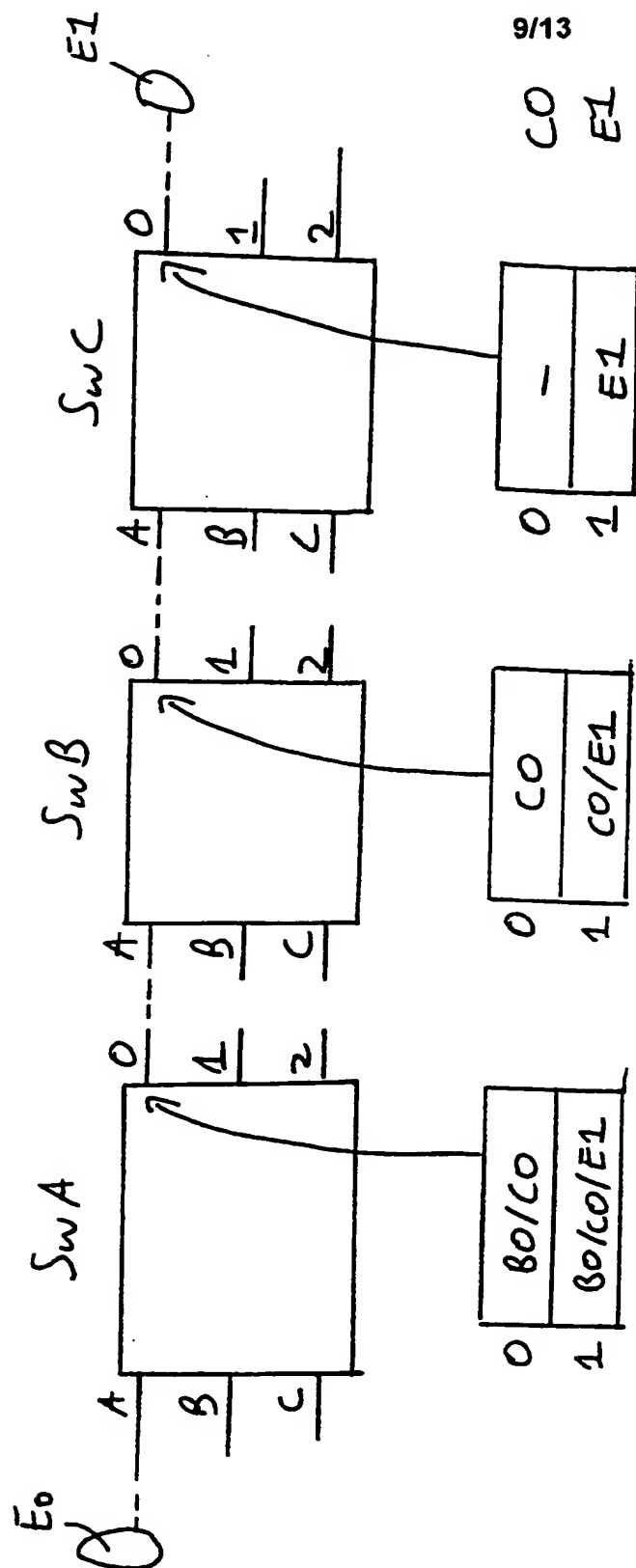


Fig. 6



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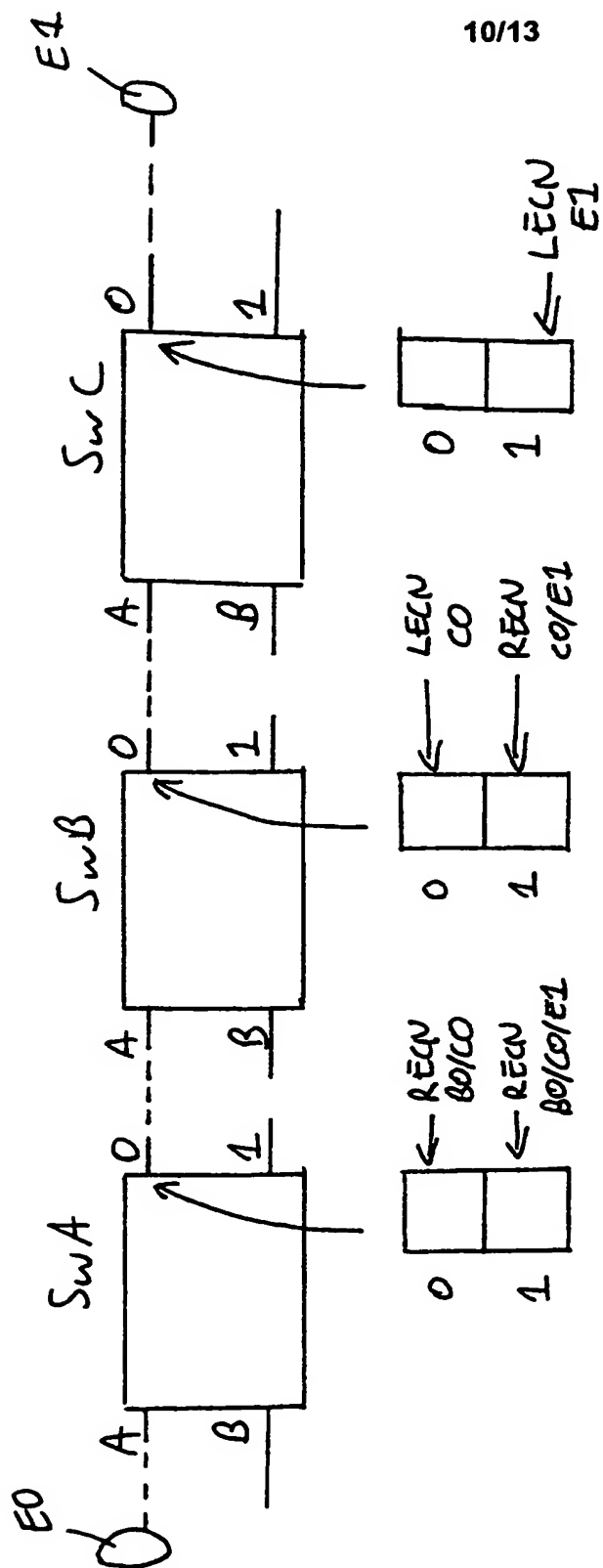


Fig. 8

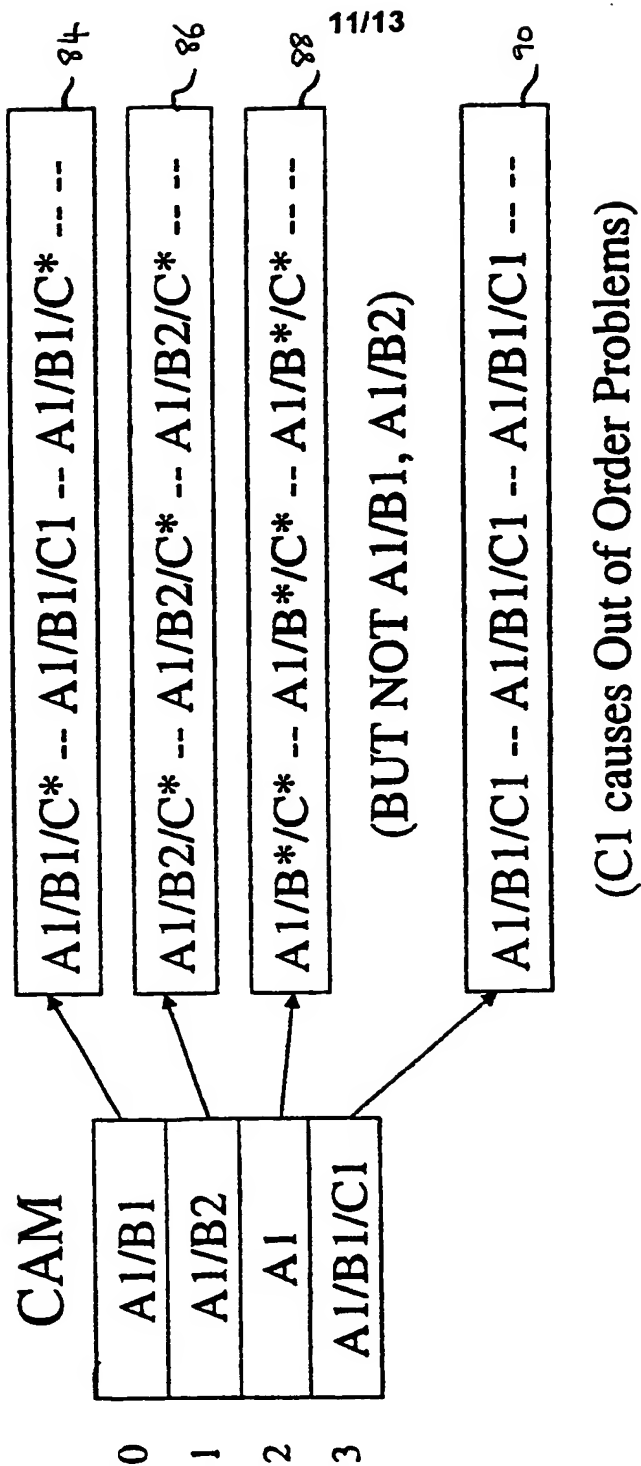


Fig. 9

Strategy 2.1 (Form new CAM lines)

Link in hot queue A1B1 to activate new more specific hot queue A1B1C1

Cold queue (R/L means Request is received, and Link is formed)

0 A1B1C1	10 A1B1C1	20 A1B1C1	30 A1B1C1	40 A1B1C1
1 C2	11 C2	21 C2	31 C2	41 C2
2 B2C1	12 B2C1	22 B2C1	32 B2C1	42 B2C1
3 C2	13 C2	23 C2	33 C2	43 C2
4 B3C1	14 B3C1	24 B3C1	34 B3C1	44 B3C1

R/L A1B1	R/L A1 (Less)	Req A1B1C1 (More)
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	CAM	Hot Queue
Link 0	A1B1	10 A1B1C1 11 C2 20 A1B1C1 21 C2 31 C2 41 C2
		Link A1B1C1
Link 1	A1	22 A1B2C1 23 C2 24 B3C1 32 A1B2C1 33 C2 34 B3C1 42 B2C1 43 C2 44 B3C1
Link 2	A1B1C1	30 A1B1C1 40 A1B1C1

Fig. 10

Strategy 2.2 (Overwrite Existing CAM Lines)

Overwrite and relink shortest existing hot queue (A1) to cold queue

Cold queue

0 A1B1C1	10 A1B1C1	20 A1B1C1	30 A1B1C1	22 A1B2C1	40 A1B1C1
1 C2	11 C2	21 C2	31 C2	23 C2	41 C2 ?
2 B2C1	12 B2C1	22 B2C1	32 B2C1	32 A1B2C1	42 B2C1
3 C2	13 C2	23 C2	33 C2	33 C2	43 C2
4 B3C1	14 B3C1	24 B3C1	34 B3C1	34 B3C1	44 B3C1
R/L A1B1	R/L A1B2	R/L A1 (Less)	Req A1B1C1 (More)	Relink A1	

	CAM	Hot Queue	
Link 0	A1B1	10 A1B1C1 11 C2 20 A1B1C1 21 C2 30 A1B1C1 31 C2 41 B1C2 ?	Keep A1B1 in existence, to catch new A1B1C2 packets (eg packet 41) Link A1B1C1
Link 1	A1B2	22 A1B2C1	Relink to cold queue
2	A1	23 C2	
3	A1B1C1	32 A1B2C1 33 C2 34 B3C1 40 A1B1C1	Relink to cold queue

Fig. 11